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09/760,027

01/12/2001

Tony M. Brewer

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01/12/2005

DALLAS OFFICE OF FULBRIGHT & JAWORSKI L.L.P.

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EXAMINER

KADING, JOSHUA A

ART UNIT

PAPER NUMBER

2661

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/760,027

Applicant(s)

BREWER ET AL.

Examiner

Joshua Kading

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-10 and 12-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 28 is/are allowed.
- 6) ☒ Claim(s) 1,3,5-9 and 14-20 is/are rejected.
- 7) ☒ Claim(s) 10-13 and 21-27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement filed 3 March 2001 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 5-9, and 14-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Brewer et al. (U.S. Patent 6,711,357 B1).

The applied reference has a common assignee with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in

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the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claim 1, Brewer discloses "a method of protection switching of

5 redundant central arbiters in a router system, comprising:

selecting an active central arbiter (col. 4, lines 62-63);

selecting a standby central arbiter different from said active central arbiter (col. 5, lines 62-66);

communicating the active status of said active central arbiter; communicating the
10 standby status of said standby central arbiter ((col. 12, lines 37-39 whereby selecting the active CAM and ignoring the standby CAM the status of the CAMs must be known and communicated);

receiving at said active central arbiter requests to pass chunks of data through an optical switching fabric; at said active central arbiter in response to said requests
15 concurrently issuing grants to pass said chunks and issuing optical switch configuration information corresponding to said grants, such that each said chunk passes during a single chunk period (col. 5, lines 27-45);

at said standby central arbiter periodically receiving keep-alive requests; at said standby central arbiter concurrently issuing keep-alive grants and standby configuration
20 information in response to said keep-alive requests (col. 26, lines 55-61 where it is inherent in the standby arbiter that in order to assume control from the active arbiter, all current control, configuration, and data information must be known to both arbiters at

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the time of "take over", this means that the standby arbiter must be operational at the same time as the active arbiter so that in case of failure it can assume control immediately); and

interchanging said active and standby status of said respective active and
5 standby central arbiters, such that said standby central arbiter becomes a new active central arbiter and said active central arbiter becomes a new standby central arbiter (col. 26, lines 55-61);

wherein decisions of said selecting and said interchanging are initiated by a control processor from the group consisting of a master control processor (MCP) and
10 shelf control processors (figure 1, element 105; col. 4, lines 56-57 and col. 6, lines 62-65)."

Regarding claim 3, Brewer discloses, "the method of claim 1 wherein said selecting and said interchanging are performed by writing a CSR to said respective
15 active and standby central arbiters (col. 17, lines 33-37 whereby writing to the CSR has effectively selected the arbiter that will transmit the data)."

Regarding claim 5, Brewer discloses, "the method of claim 1 wherein: said communicating of said active status occurs simultaneously from said active central
20 arbiter to an optical switch ASIC and to a plurality of ingress ASICS (col. 51, lines 62-col. 6, lines 1-8); and said communicating of said standby status occurs simultaneously

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from said standby central arbiter to an optical switch ASIC and to a plurality of ingress ASICS (col. 51, lines 62-col. 6, lines 1-8)."

Regarding claim 6, Brewer discloses, "the method of claim 5 wherein said issuing
5 grants and said issuing corresponding switch configuration information both occur within the same chunk period (col. 6, lines 14-24 and col. 6, lines 66-col. 7, lines 1-3)."

Regarding claim 7, Brewer discloses, "the method of claim 6 wherein said issuing
keep-alive grants and said issuing standby configuration information both occur within
10 the same chunk period (col. 6, lines 14-24 and col. 6, lines 66-col. 7, lines 1-3)."

Regarding claim 8, Brewer discloses, "the method of claim 7 wherein said
requests received by said active central arbiter are issued from a plurality of ingress
ASICS through first multiple links (col. 5, lines 28-46 where the first multiple links are
15 links 116)."

Regarding claim 9, Brewer discloses, "the method of claim 8 wherein said grants
issued by said active central arbiter are received by said plurality of ingress ASICS
through said first multiple links (col. 5, lines 28-46)."

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Regarding claim 14, Brewer discloses, "the method of claim 9 wherein said
optical switch configuration information is issued by said active central arbiter to said

optical switching fabric through second multiple links differing from said first multiple links (col. 5, lines 28-46 links 118)."

Regarding claim 15, Brewer discloses, "the method of claim 14 wherein said
5 optical switch configuration information is issued by an active central arbiter ASIC in said active central arbiter to an optical switch ASIC in said optical switching fabric (figure 1, elements 20 and 118)."

Regarding claim 16, Brewer discloses, "the method of claim 15 wherein said
10 keep-alive requests received by said standby central arbiter are issued from a plurality of ingress ASICS through third multiple links differing from said first and second multiple links (figure 1, element 114)."

Regarding claim 17, Brewer discloses, "the method of claim 16 wherein said
15 keep-alive grants issued by said standby central arbiter are received by said plurality of ingress ASICS through said third multiple links differing from said first and second multiple links (figure 1, element 114; col. 6, lines 14-19)."

Regarding claim 18, Brewer discloses, "the method of claim 17 wherein said
20 standby configuration information is issued by said standby central arbiter to said optical switching fabric through fourth multiple links differing from said first, second, and third multiple links (figure 1, element 119; col. 6, lines 14-19)."

Regarding claim 19, Brewer discloses, "the method of claim 18 wherein said standby configuration information is issued by a standby central arbiter ASIC in said standby central arbiter to an optical switch ASIC in said optical switching fabric (figure 1, elements 20 and 119)."

Regarding claim 20, Brewer discloses, "the method of claim 19 wherein the issuing of said keep-alive requests and the receiving of said keep-alive grants by said ingress ASICS is performed cyclically (col. 6, lines 66-col. 7, lines 1-3 where it is inherent that the issuing of requests and receiving of grants is cyclically in a packet based communication system because the system will always receive new packets, and each time a new packet is received the request/receiving is repeated)."

Allowable Subject Matter

Claims 10-13 and 21-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 28 is allowable as indicated in the Office Action mailed 26 May 2004.

Response to Arguments

Applicant states that a supplemental IDS has been submitted. However, the Office has not received such a supplemental IDS.

Applicant's arguments, see REMARKS, page 11, Claim Objections, filed 24 August 2004, with respect to the objections to claims 2, 21, 24, 25, 26, and 28 have been fully considered and are persuasive. The objections of claims 2, 21, 24, 25, 26, and 28 have been withdrawn.

Applicant's arguments, see REMARKS, page 11, 35 U.S.C. 112 Claim Rejections, filed 24 August 2004, with respect to the rejections of claims 2, 11-13, and 26-27 have been fully considered and are persuasive. The 35 U.S.C. 112 rejections of claims 2, 11-13, and 26-27 have been withdrawn.

Applicant's arguments with respect to claims 1, 3, 5-9, and 14-20 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (571) 272-3070. The examiner can normally be reached on M-F: 8:30AM-5PM.

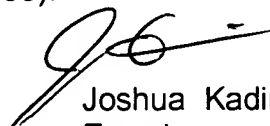
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on (571) 272-3078. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Joshua Kading
Examiner
Art Unit 2661

January 3, 2005



BOB PHUNKULH
PRIMARY EXAMINER